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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/674,355	01/15/2001	Ryo Takeda	851663.417US	5240

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EXAMINER
TRAN, TRANG U

ART UNIT	PAPER NUMBER
2614	

DATE MAILED: 07/30/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/674,355	TAKEDA ET AL.	
	Examiner	Art Unit	
	Trang U. Tran	2614	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *05 September 2001* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 9-10 and 13-15 are rejected under 35 U.S.C. 102(b) as being anticipated by Shanley, II et al. (US Patent No. 4,295,166).

In considering claim 9, Shanley, II et al. discloses all the claimed subject matter, note 1) the claimed a minimum signal detector for detecting a minimum signal level amongst a plurality of colour channel reference signals, a comparator that compares said minimum signal level with a fixed voltage reference signal and generates a corresponding output, and an additive feedback coupling of said comparator output signal and each of said colour channel reference signals is met by a keyed sampling comparator 55 arranged in a closed automatic brightness and beam current limiting control loop (Fig. 1, col. 3, line 35 to col. 4, line 58).

In considering claim 10, the claimed comprising a brightness control circuit for adjusting the video signal brightness level by manual adjustment of said colour channel reference signals, wherein said additive feedback coupling of said comparator output signal is coupled through said brightness control circuit is met by the brightness determinative D.C. level of each of the r, g, b signals can be varied by varying the levels of the signals applied to the reference signal input of comparator 55 (col. 3, lines 42-66).

Claim 13 is rejected for the same reason as discussed in claim 9

Claim 14 is rejected for the same reason as discussed in claim 9.

Claim 15 is rejected for the same reason as discussed in claim 9.

3. Claims 11 and 16-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Sano et al. (US Patent No. 5,400,086).

In considering claim 11, Sano et al. discloses all the claimed subject matter, note 1) the claimed a plurality of colour channel control means each coupled to receive as input a respective colour channel video signal and colour channel reference signal and to generate a respective adjusted colour channel video signal and adjusted colour channel reference signal is met by the brightness control by adding circuits 56R, 56G, and 56B, or 58R, 58B and 58G (Fig. 21, col. 16, lines 18-31), 2) the claimed a plurality of clamping means, each clamping means corresponding to a respective colour channel control means and coupled to receive as input the respective adjusted colour channel video signal and adjusted colour channel reference signal and to produce a corresponding clamping feedback signal is met by the clamp circuits of the level compensation circuit (Figs. 21, 22 and 37, col. 16, lines 32-38 and col. 26, lines 5-61), 3) the claimed a brightness limitation means coupled to receive the adjusted colour channel reference signal from each colour channel control means to produce a corresponding brightness feedback signal is met by the brightness control circuit or the white balance control circuit 33 (Fig. 21, col. 16, line 32 to col. 37, line 5), and 4) the claimed wherein each said colour channel control means includes a first adder in path of the colour channel video signal, to which said clamping feedback signal is coupled,

and a second adder in the path of the colour channel reference signal, to which said brightness feedback signal is coupled is met by the brightness control by adding circuits 56R, 56G, and 56B, or 58R, 58B and 58G (Fig. 21, col. 16, lines 18-31).

Claim 16 is rejected for the same reason as discussed in claim 11.

Claim 17 is rejected for the same reason as discussed in claim 11 and further the claimed a brightness circuit coupled to the brightness limitation circuit for each of the color video channels and configured to generate a user-adjustable brightness limitation signal to the second adder in each of the plurality of color channel control circuits is met by the white balance control circuit 33 (Figs. 14 and 16, col. 11, line 50 to col. 13, line 14 and col. 23, lines 12-16).

Claim 18 is rejected for the same reason as discussed in claim 11.

Claim 19 is rejected for the same reason as discussed in claim 11.

Claim 20 is rejected for the same reason as discussed in claim 11.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 1-8 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sano et al. (US Patent No. 5,400,086) in view of Shanley, II et al. (US Patent No. 4,295,166).

In considering claim 1, Sano et al. discloses all the claimed subject matter, note 1) the claimed for each colour channel, a control circuit and clamping circuit for generating a colour channel reference signal and controlling a colour channel video signal, and a brightness limitation circuit coupled to receive the colour channel reference signal from each of the colour channels and coupled to provide a feedback signal to regulate a brightness level of each video signal according to a comparison of a signal level amongst the colour channel reference signals and a fixed reference signal level is met by the comparisons 59R, 59G and 59B (Fig. 21, col. 16, line 18 to col. 17, line 5). However, Sano et al explicitly do not disclose the claimed a comparison of a minimum signal level amongst the colour channel reference signal sand a fixed reference signal level. Shanley, II et al teach that a signal input of comparator 55 senses the low level blue (b) signal output of matrix 18, and a reference input of comparator 55 senses both a brightness determinative reference voltage and a beam current control voltage as will be discussed (Fig. 1, col. 3, lines 34-68). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the low level blue (b) signal output as taught by Shanley, II et al into Sano et al's system in order to maintain beam limiting capability when normal operation of the control circuit is disrupted.

In considering claim 2, the claimed wherein the brightness limitation circuit comprises a minimum detection circuit for detecting and outputting a minimum signal level from amongst the colour channel reference signals, and a comparator having as

inputs said fixed reference signal level and said minimum signal level, and producing said feedback signal as output is met by Fig. 1, col. 3, lines 34-68 of Shanley, II et al.

In considering claim 3, the claimed wherein said comparator is coupled to receive said minimum signal level at its negative input and said fixed reference signal level at its positive input is met by the comparisons 59R, 59G and 59B (Fig. 21, col. 16, line 18 to col. 17, line 5) of Sano et al.

In considering claim 4, the claimed wherein each said control circuit includes a plurality of adders coupled in the signal path of the corresponding colour channel reference signal, and wherein said feedback signal is coupled as input to one of said adders is met by the brightness control by adding circuits 56R, 56G, and 56B, or 58R, 58B and 58G (Fig. 21, col. 16, lines 18-31) of Sano et al.

In considering claim 5, the claimed wherein said feedback signal is coupled from the brightness limitation circuit to the control circuit by way of a brightness control circuit which enables manual brightness adjustment of the colour channels is met by the brightness determinative D.C. level of each of the r, g, b signals can be varied by varying the levels of the signals applied to the reference signal input of comparator 55 (col. 3, lines 42-66) of Shanley, II et al.

In considering claim 6, the claimed wherein said brightness control circuit incorporates an adder for combining the feedback signal with a manual brightness adjustment signal is met by is met by the gain controlled amplifier 24 (Fig. 1, col. 3, lines 42-66) of Shanley, II et al.

In considering claim 7, the claimed further including at least one cut-off adjustment circuit coupled to provide input to a respective adder in the signal path of the colour channel reference signal in each control circuit is met by the level compensation circuit for cut-off adjustment 11R, 11G and 11B (Fig. 1, col. 2, lines 28-45) of Sano et al.

In considering claim 8, the claimed wherein each said control circuit includes an adder circuit coupled in the signal path of the corresponding colour channel video signal, and wherein a feedback signal from said clamping circuit, generated according to the colour channel video signal and the colour channel reference signal, is coupled as input to the adder circuit is met by the adding circuits 56 R, 56G and 56 B (Fig. 21, col. 16, lines 18-38) of Sano et al.

Claim 12 is rejected for the same reason as discussed in claim 1.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Goto et al. (US Patent No. 6,097,445) disclose white balance self-adjusting apparatus for use in color display.

Tsujihara et al. (US Patent No. 5,504,538) disclose video signal processor for controlling the brightness and contrast of a display device.

Gurley et al. (US Patent No. 5,317,400) disclose non-linear customer contrast control for a color television with autopix.

Vilard (US Patent No. 5,040,065) discloses video image reproducing apparatus provided with a contrast adjustment device, and method of adjusting the contrast in such a reproducing apparatus.

Takagi et al. (US Patent No. 4,797,733) disclose white balance adjusting device for a color video camera.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Trang U. Tran** whose telephone number is **(703) 305-0090.**

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **John W. Miller,** can be reached at **(703) 305-4795.**

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 872-9314 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

TT TT
July 26, 2003

JOHN MILLER
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600